Abstract of the Disclosure

A heating system for heating air, especially for heating the interior of a motor vehicle, with a first heater (10), a second heater (12), and a flow path between the first heater (10) and the second heater (12), there being at least one auxiliary fan (50) with which a flow in the direction from the second heater (12) to the first heater (10) can be produced and a process for influencing the air flows in the heating system are designed to counteract overpressurization. Furthermore, an air heater and a process for detecting backflowing hot air through an air heater use a temperature sensor in an inlet area of the heater for that purpose.